BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. GNR-02-01

DIRECT TESTIMONY OF CLINT KALICH
REPRESENTING AVISTA CORPORATION

I. INTRODUCTION

Q. Please state your name, business address, and present position with Avista Corporation.

A. My name is Clint Kalich. My business address is located at 1411 East Mission Avenue in Spokane, Washington. The Company employs me as the Manager of Resource Planning and Analysis working in the Energy Resources Department.

Q. Please state your educational background and professional experience.

A. I graduated from Central Washington University in 1991 with a Bachelor of Science Degree in Business Economics. Shortly after graduation I accepted an analyst position with Economic and Engineering Services, Inc. (now EES Consulting, Inc.), a northwest management-consulting firm located in Bellevue, Washington. Working primarily for municipalities, public utility districts, and cooperatives in the area of electric utility management, my specific areas of focus were economic analyses concerning new resource development, Bonneville Power Administration rate case proceedings, integrated (least-cost) resource planning, and demand-side management program development. In late 1995 I left Economic and Engineering Services, Inc. to join Tacoma Power in Tacoma, Washington. As a Power Analyst with the municipality, I provided key analytical and policy support in the areas of resource development, procurement, and optimization; hydroelectric operations and re-licensing; unbundled power supply rate-making; contract negotiations; and system operations. I helped develop, and ultimately managed, Tacoma Power's industrial market access program serving one-quarter of the company's retail load. In mid-2000 I joined Avista Utilities as a Senior Power Resource Analyst. Early in 2001 I was promoted to my current capacity. I assist the Company in the areas of resource analyses, integrated resource planning, dispatch modeling, resource procurement, and various regulatory proceedings.

Q. What is the scope of your testimony in this proceeding?

A. My testimony will describe variables the Company believes should be changed to more appropriately represent the Company's avoided costs. My testimony will address the impacts of the various assumption changes on the avoided cost rates for both "Fueled" and "Non-Fueled" projects.[1] Finally, I will show the rate impact of the variable changes when applied to a purchase contract for a ten megawatt PURPA resource.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring one sixteen page exhibit marked as Exhibit No. 1. Pages five through ten were developed by the Northwest Power Planning Council ("NWPPC"). All information contained in the remaining pages was prepared by me or under my direction.

II. DEFICIT YEAR ADJUSTMENT

Q. What is the present deficit year included in the Company's avoided cost rate schedule, and has it changed?

A. The present deficit year included in the avoided cost rate schedule for the Company is 2010. Based on an updated loads and resources tabulation, attached as page one of my exhibit, the Company's first deficit should be adjusted to the year 2007.

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[1] "Non-Fueled" projects are those PURPA projects that consume a renewable energy source, such as biomass or wind. These projects obtain a price that includes the estimated fuel cost associated with the avoided cost resource. "Fueled" PURPA projects consume fossil fuels and receive only the non-fueled portion of their plant cost based on the avoided cost resource. Their energy payment is adjusted every year based on recent natural gas prices.

Q. What are the impacts on avoided cost rates of using a 2007 deficit year instead of 2010?

A. Using a 2007 deficit year for the Company increases prices in the avoided cost rate schedule for Non-Fueled projects and decreases them for Fueled projects. Using the Commission Staff model I found that rates for twenty-year contract rise by between $6 and $10 per MWh for Non-Fueled contracts beginning in 2002 and 2007, respectively. Fueled contracts decrease by between $4 and $6 per MWh. The avoided cost rates when calculated using a 2007 deficit year are included on pages two and three of my exhibit.

The impacts of the various assumption changes described below will be compared to avoided cost rates set at levels reflective of a 2007 deficit year. I will further modify the Commission Staff's avoided cost spreadsheet model for the recommended variable changes made below.

III. SAR RESOURCE VARIABLES

Q. Please provide and overview of the proposed changes to the avoided cost rates?

A. The Company proposes revising various assumptions surrounding the "SAR" resource. Specifically, the Company provides assumptions for capital cost, variable operation and maintenance ("O&M") costs, fixed O&M costs, capacity factor, and heat rate.

Besides the assumptions underlying the SAR resource, the Company is proposing the adoption of an alternate natural gas price forecast. We also advocate adopting Surplus Energy Costs based on recent transactions entered into by the Company. Finally, adjustments to the various price escalation rates and the Company's Deficit Year are presented.

Q. Please describe the assumption changes proposed by the Company for the SAR resource.

A. The Company advocates adoption of combined-cycle combustion turbine ("CCCT") assumptions prepared by the Generation Resource Advisory Committee ("GRAC") of the NWPPC. The GRAC has developed assumptions for capital costs, fixed and variable O&M costs, capacity factor, and heat rate.

Q. Why does the Company support the adoption of CCCT variables from the NWPPC?

A. The present CCCT resource assumptions were set seven years ago in 1995. Since that time a number of CCCTs have been built on the West Coast and their costs now are better known. The Company believes that the NWPPC assumptions are a good representation of CCCT costs today. The data were derived from a collaborative process coordinated by the NWPPC. The GRAC consists of industry experts drawn from utilities, energy marketers, resource developers, energy-related governmental agencies, and regulators, to develop assumptions for use in the forthcoming Power Plan. Because of its unique collaborative process, the NWPPC data benefits from a level of quality and review often not present is such efforts. The Company has evaluated various CCCT installations in recent years and concludes that the NWPPC GRAC assumptions are reasonable. Page four of my exhibit provides a list of GRAC members.

Q. What are the GRAC variable assumptions the Company is proposing?

A. The table below contrasts each of the assumptions.

Comparison of Existing SAR Assumptions
Current Avoided Cost Assumptions and NWPPC–GRAC

Assumption	Current	Current	GRAC
Cost Base Year *	1994	2000	2000
Plant Cost ($/kW)	667.0	743.6	577.0
Fixed O&M ($/kW/year) **	7.43	8.28	14.75
Variable O&M ($/MWh)	1.65	1.84	2.80
Capacity Factor (percent)	92.0	92.0	89.5
Heat Rate (Btu/kWh HHV)	7,350	7,350	7,340

* IPUC values are escalated using Implicit Price Deflator for US Gross Domestic Product.

** the Company has increased the plant cost estimate of the NWPPC GRAC by $6.65/kW-year to reflect property tax and insurance expenses.

As the table explains, the NWPPC estimate of capital costs for a CCCT is significantly lower than the current avoided cost assumption, by 22 percent using 2000 prices. However, both fixed and variable O&M are significantly higher, by 78 percent and 52 percent respectively. The capacity factor is modestly lower at 89.5 percent, and accounts for a five percent forced outage rate and 21 days of annual maintenance. The NWPPC also recognizes a ten British thermal unit (Btu) decrease, to 7,340 Btu per kWh from 7,350 Btu per kWh, in average lifecycle heat rate. The document relied on by the Company in preparing this analysis is included on pages five through ten of Exhibit No. 1.

Q. The plant cost reduction appears to be offset by increases in both fixed and variable O&M costs. Has the Company estimated the cumulated impact of the changes presented in the table above?

A. Yes. On a cumulative basis the lower plant cost is equaled by increases in both fixed and variable O&M. For 20-year Fueled resource contracts, the cumulative change is between a 3.3 percent and 7.5 percent price *decrease* from avoided cost rates under the existing assumptions and a 2007 deficit year. For 20-year Non-Fueled resource contracts, the impact is a *decrease* in avoided cost of between 1.2 percent and 1.4 percent.

IV. NATURAL GAS VARIABLES

Q. Please explain the Company's proposal for changing natural gas prices used in the avoided cost rate calculations.

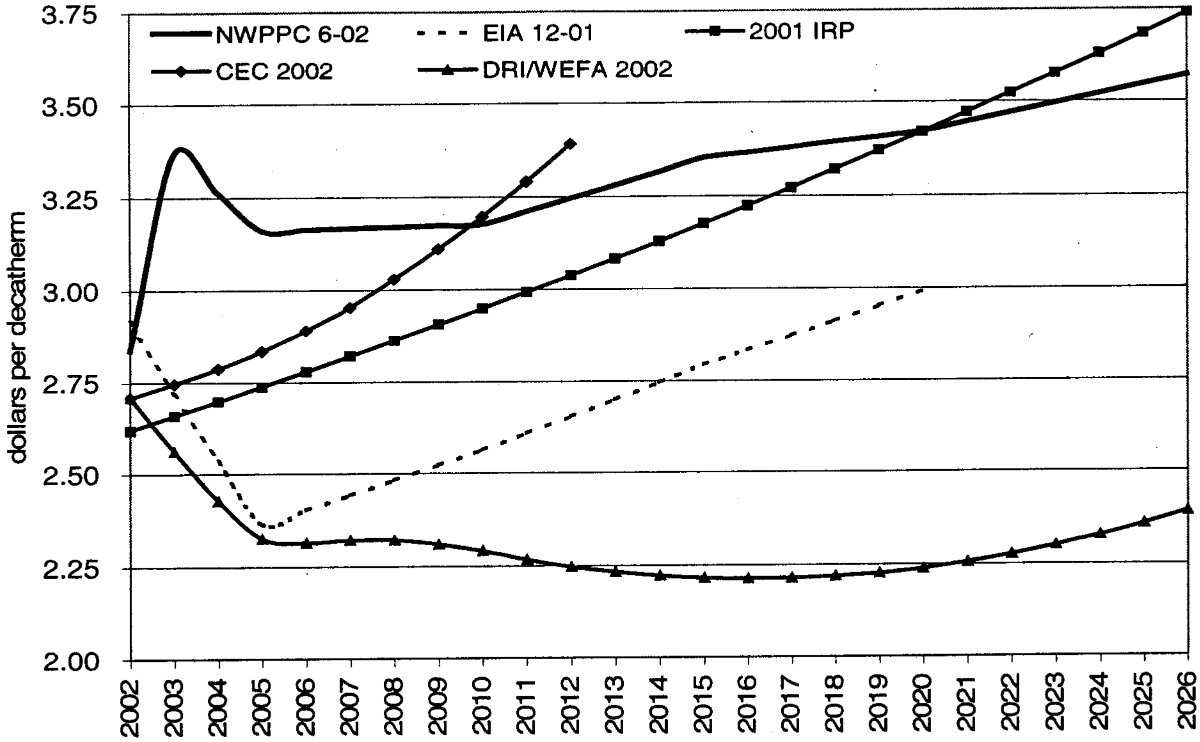
A. Similar to the use of the NWPPC GRAC assumptions for CCCT costs, the Company proposes that the Commission adopt the present natural gas forecast of the NWPPC Natural Gas Advisory Committee ("NGAC"). The NGAC, like the GRAC, is comprised of various industry experts from the Northwest that have developed the underlying natural gas price forecast for the forthcoming Power Plan. A member list is included on page eleven of my exhibit.

Instead of using a beginning-year value with a long-term escalator, the Company requests the Commission explicitly adopts the annual gas price values.

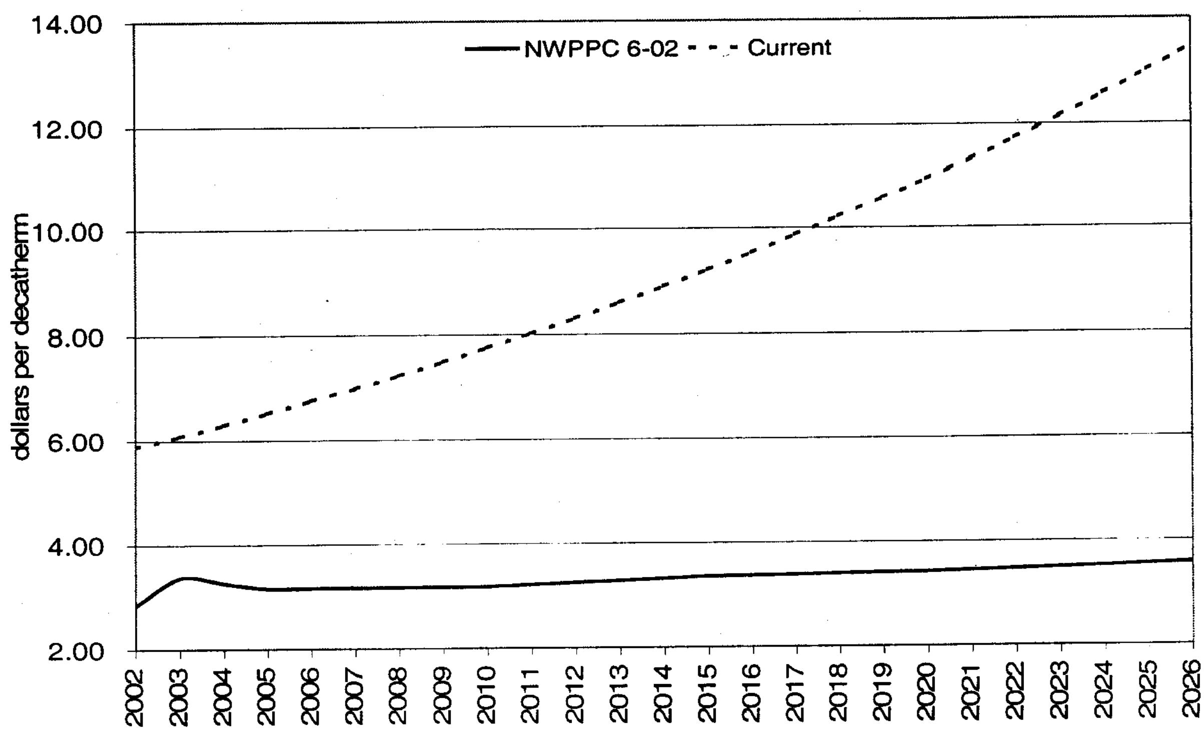
Q. How does the NWPPC forecast compare with other available natural gas forecasts?

A. Page twelve of Exhibit No. 1 displays five long-term natural gas price forecasts, including the one prepared by the NWPPC. Besides the NWPPC forecast, I have included the natural gas base price forecast from the Company's 2001 IRP (April 2001), the latest Energy Information Administration ("EIA") natural gas price forecast (December 2001), the latest California Energy Commission ("CEC") forecast (June 2002), and a forecast based upon future natural gas price escalation assumed by DRI/WEFA in its *Review of the US Economy*, Spring 2002. All values are presented in 2002 prices. A simplified view of page twelve from my exhibit is displayed below.

Natural Gas Price Forecasts
2002 Prices



Current NWPPC and Present Avoided Cost Rate Natural Gas Price Forecasts
2002 Prices



Page thirteen of Exhibit No. 1 provides a comparison of the NWPPC forecast and the values presently embedded in the existing avoided cost rates. The gas prices included in the existing avoided cost rates are, on average, 2.75 times higher than the NWPPC forecast. A simplified view of page thirteen is displayed above.

Q. Is the price forecast prepared by the NWPPC a reasonable forecast of future natural gas prices?

A. Yes. The natural gas price forecast prepared by the NWPPC is a reasonable long-term forecast for use in this proceeding. In a manner similar to the NWPPC GRAC, the forecast was developed using a collaborative process coordinated by NWPPC staff. The NWPPC invited a variety of northwest natural gas industry experts to discuss the future of natural gas supply and prices. The results of these meetings became the NWPPC natural gas price forecast. Additionally, the forecasted values are reasonable when compared with various other forecasts made by peers at the EIA, the California Energy Commission, DRI/WEFA, and this Company.

Q. Did the Company consider using one of the other forecasts?

A. Yes. The Company considered recommending the use of its 2001 IRP natural gas price forecast or the DRI/WEFA price forecast. In either case the resulting avoided costs for Non-Fueled projects would be reduced substantially. However given the process under which it was developed, and because the forecast is more recent than the Company's 2001 IRP forecast, the Company recommends the NWPPC natural gas price forecast for this proceeding.

Q. Has the Company estimated the impact of using the NWPPC natural gas price forecast?

A. Yes. For a twenty-year contract, adopting the NWPPC natural gas price forecast in addition to the SAR variables reduces the cumulative avoided cost rates for Non-Fueled projects by between 49.9 percent and 53.1 percent, depending on the year in which the contract begins. Natural gas prices are not included in the payment calculation for Fueled projects; therefore, changing natural gas prices does not affect the avoided cost payment for Fueled projects.

V. OTHER VARIABLES

Q. Is the Company proposing changes to other avoided cost variables?

A. Yes. The Company recommends Commission adoption of a 2.4 percent escalation rate for O&M, plant cost, and the line identified as "Tilting Rate" in the avoided cost methodology. This rate is consistent with the Company's 20-year estimate for Gross Domestic Product inflation.

The Company recommends adjusting the "Surplus Energy Cost" to reflect recent market conditions and transactions by the Company. For 2002 the Company recommends adopting $22.12/MWh based on the actual Mid-C firm index prices through June of this year, and forward prices from July through December. For 2004-06, the Company recommends using the average rate of recent purchases it has made for that period, or $29.56 per MWh.[2] For 2003, the Company recommends $24.37 per MWh which is the interpolated price using the 2002 and 2005 (the mid-point of the 2004-06 purchase period) prices. For 2007 through 2010, the Company has purchased power for an average price of 30.73 per MWh and recommends this price. Because

[2] 100 MW 04-06 purchases were made in December 2001. The 04-06 average price excludes a 25 MW purchase made from Enron in June 2001, as the Company believes it isn't reflective of today's market prices and was made during a volatile market period. 75 MW 07-10 purchases were made between May and June 2002.

none of the regulated utilities in this proceeding have surpluses further out than 2010, the Company has not evaluated surplus energy costs beyond 2010.

VI. RESULTANT AVOIDED COST RATES

Q. What would the avoided cost rates be were the Commission to adopt all of the Company's recommended variable changes as filed; and how do they compare to avoided cost rates for a deficit year of 2007?

A. The Non-Fueled project avoided cost rates generated by the proposed variable changes are shown on page fourteen of Exhibit No. 1. Twenty-year rates, depending on the starting year of the contract, vary from $38.09 per MWh for contracts beginning in 2002 to $48.44 per MWh for contracts beginning in 2007. On a percentage basis, the avoided cost rates are reduced by 40.9 percent for a contract beginning in 2002 and 51.1 percent for a contract beginning in 2007.

Fueled project avoided cost rates are displayed on page fifteen of Exhibit No. 1. Twenty-year rates vary from between $20.32 per MWh for contracts beginning in 2002 to $16.04 per MWh for contracts beginning in 2007. On a percentage basis, twenty-year avoided cost rates for Fueled projects are reduced by between 10.2 percent and 13.7 percent.

Q. Has the Company estimated the anticipated customer impact of these lower avoided cost rates?

A. Yes. For each ten megawatts of twenty-year contracted PURPA Non-Fueled resource energy, the proposed avoided cost assumption changes would reduce customer costs by between $2.3 million and $4.4 million annually when compared to avoided cost rates calculated for a utility with a deficit year of 2007, again depending on when the resource enters commercial service. Similar contract terms for Fueled resources would range between a $0.1 *increase* and $1.3 million *decrease* in costs annually. Page sixteen of my exhibit details the annual savings for twenty-year Fueled and Non-Fueled contracts beginning in calendar years 2002 through 2007.

Q. Does the Company believe its proposed changes to the avoided cost variables, when taken together, fairly represent avoided cost rates for PURPA resources?

A. Yes. The Company in this proceeding has proposed an integrated set of assumptions that when taken together provide an equitable set of avoided cost rates. The Company has attempted to represent those costs which it would reasonably expect to incur were the Company to develop a new generation resource.

Q. Does this conclude your pre-filed direct testimony?

A. Yes it does.